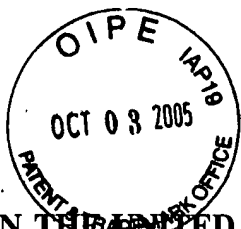


ju
KNI-201-A



*Receipt
JFW*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Matsuda
Serial Number: 10/528,900
Filed (also 371 date): 23 March 2005
International Application: PCT/JP02/10104 filed 27 September 2002
Group Art Unit: 2877
Examiner: unknown
Confirmation Number: 4167
Title: Flow Cell And Particle Measuring Apparatus
Using The Same

REQUEST FOR CORRECTED FILING RECEIPT

Commissioner For Patents
Post Office Box 1450
Alexandria, Virginia 22313-1450

Sir:

With respect to the identified patent application, applicant respectfully requests a corrected filing receipt with the following corrections:

Please correct the "Title" from "Flow cell, and particle measurement device using the same" to --Flow cell and particle measuring apparatus using the same--.

This requested correction is in accordance with the specification as filed in the United States Patent And Trademark Office (a copy of page 1 of which is attached), in accordance with the Transmittal Letter To The United States Designated/Elected Office filed with the new application (a copy of which is attached), and in accordance with the Application Data Sheet filed with the new application (a copy of page 1 of which is attached).

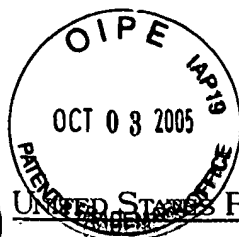
Applicant also encloses a hand-amended copy of the filing receipt showing the requested correction.

Favorable consideration is respectfully requested.

Respectfully submitted,

Customer Number 21828
Carrier, Blackman & Associates, P.C.
24101 Novi Road, Suite 100
Novi, Michigan 48375
30 September 2005

Joseph P. Carrier
Joseph P. Carrier
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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/528,900	03/23/2005	2877	900	KNI-201-A	4	15	2

CONFIRMATION NO. 4167

21828
 CARRIER BLACKMAN AND ASSOCIATES
 24101 NOVI ROAD
 SUITE 100
 NOVI, MI 48375

FILING RECEIPT



OC000000017004220

RECEIVED SEP 26 2005

Date Mailed: 09/16/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Tomonobu Matsuda, Tokyo, JAPAN;

Assignment For Published Patent Application

Rion Co., Ltd., Tokyo, JAPAN

Power of Attorney: The patent practitioners associated with Customer Number 21828.

Domestic Priority data as claimed by applicant

This application is a 371 of PCT/JP02/10104 09/27/2002

Foreign Applications

Projected Publication Date: 12/22/2005

Non-Publication Request: No

Early Publication Request: No

Title

FLOW CELL AND PARTICLE MEASURING APPARATUS
~~Flow cell, and particle measurement device using the same~~ USING THE SAME

Preliminary Class

356

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

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No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

DESCRIPTION

FLOW CELL AND PARTICLE MEASURING APPARATUS USING THE SAME

5 Technical Field

[001]

The present invention relates to a flow cell for flowing sample fluid therethrough to detect light scattered by particles contained in the sample fluid when irradiated with light so as to obtain information such as a particle diameter, and also relates to a particle measuring apparatus using the flow cell.

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Background Art

[002]

A flow cell 100 used for a conventional particle measuring apparatus as shown in FIG. 6(a) is made of a transparent member, and provided with a linear passage 100a having a predetermined length, the cross-sectional shape of which is rectangular. Also, the shape of the flow cell is an L-shaped tube as a whole. The central axis of the linear passage 100a substantially corresponds with the axis of receiving scattered light L_s by a condenser lens system 101 (See Japanese Patent Application Publication No. 11-211650). Incidentally, reference number 102 refers to a laser light source, and reference number 103 refers to a photoelectric transducer element.

[003] 20

In the flow cell 100 used for a conventional particle measuring apparatus, inner walls b, c, d, and e unpreferably limit the path of light scattered L_s by particles passing through a particle monitoring area M, and the condensing angle of the condenser lens system 101 cannot be fully utilized.

[004]

In order to make the level of detecting scattered light L_s so as to improve the accuracy of detecting particles, it is necessary to fully utilize the condensing angle of the condenser lens system 101.

[005]

The present invention was made to solve the above-mentioned drawbacks, and the object of the present invention is to provide a flow cell which can detect scattered light more efficiently by fully utilizing the condensing angle of a condenser means, and

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		ATTORNEY'S DOCKET NUMBER KNI-201-A
INTERNATIONAL APPLICATION NO. PCT/JP02/10104	INTERNATIONAL FILING DATE 27 Sept 2002	U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/528900
TITLE OF INVENTION ~FLOW CELL AND PARTICLE MEASURING APPARATUS USING THE SAME		PRIORITY DATE CLAIMED
APPLICANT(S) FOR DO/EO/US Tomonobu MATSUDA		

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

- ☒ This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
- ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
- ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
- ☒ The US has been elected (Article 31).
- ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - ☐ is attached hereto (required only if not communicated by the International Bureau).
 - ☒ has been communicated by the International Bureau.
 - ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
- ☒ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
 - ☒ is attached hereto.
 - ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
- ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - ☐ are attached hereto (required only if not communicated by the International Bureau).
 - ☐ have been communicated by the International Bureau.
 - ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - ☒ have not been made and will not be made.
- ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
- ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
- ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

- ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
- ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
- ☒ A preliminary amendment.
- ☒ An Application Data Sheet under 37 CFR 1.76.
- ☐ A substitute specification.
- ☐ A power of attorney and/or change of address letter.
- ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13/ter.2 and 37 CFR 1.821- 1.825.
- ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
- ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
- ☒ Other items or information: **Claim Amendments under PCT Article 34, International Search Report, International Preliminary Examination Report**

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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10/528900

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JC14 PCT/PTO 23 MAR 2005

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Commissioner For Patents
PO Box 1450
Alexandria VA 22313-1450

23 March 2005

**APPLICATION DATA SHEET
INCLUDING BIBLIOGRAPHIC DATA, APPLICATION TRANSMITTAL,
AND CERTIFICATE OF MAILING**

Sir:

Enclosed please find an application for 371 U.S. National Phase Letters Patent as identified below:

Title Of Invention: FLOW CELL AND PARTICLE MEASURING
APPARATUS USING THE SAME

Application Type: 371 U.S. National Phase of International Patent
Application PCT/JP02/10104 filed 27 September 2002

Attorney Docket Number: KNI-201-A

Correspondence
Customer Number: 21828

Inventors:

First Named Inventor

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Country: Japan
Citizenship: Japanese

Publication Data:

Publication Filing Type: new utility
Published Correspondence Name And Address
Name: Carrier, Blackman & Associates, P.C.
Address: 24101 Novi Road #100
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State: MI
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Telephone: 248.344.4422
Facsimile: 248.344.1096
E-mail: cbalaw@ameritech.net

NOTE: PAIR calls this item "Preliminary
Amendment". (whiz-bang work, there.)